duce the quantity of contaminants discharged to the ground. Current government policies regarding environmental management, the increasing cost of waste disposal, increasing legal and financial liability for damage to the environment from current handling, storage, transportation, and disposal of hazardous materials and waste, and changing societal attitudes toward chemical usage and waste disposal provide strong incentives to reduce contamination sources.

There are a number of source reduction strategies that have been and can be employed in the future to protect ground water. Following is a summary of these strategies with examples from some of the state and local ground water protection programs examined by the committee. This summary is neither comprehensive nor exhaustive. The reader is advised to consider a growing body of literature on this subject such as the National Research Council (1985) report entitled Reducing Hazardous Waste Generation.

Prohibition of Activities

Prohibition of polluting activities is an effective means of source reduction. This includes elimination of ground and underground discharges, banning usage of potentially polluting products, and prohibiting certain activities in important ground water recharge areas.

For example, the Suffolk County Health Department has banned the use of organic septic system cleaners throughout the county. Land disposal of solid and hazardous waste is also prohibited in deep water recharge areas on Long Island. The New Jersey Pinelands Commission has prohibited the storage of certain hazardous materials and the land disposal of hazardous and solid waste in the Pinelands area of southern New Jersey. The Florida Department of Environmental Regulation prohibits the land disposal of hazardous waste and any new deep-well injection of hazardous waste in Florida. California has banned a number of broad-use pesticides such as ethylene dibromide (EDB) because of widespread ground water contamination from these pesticides.

Changes in Industrial Operations

Industrial processes that eliminate or reduce the quantity of waste produced can be substituted for older, more-polluting industrial processes. For example, replacement of solvent-based paints by water-based paints in the automotive industry has significantly reduced the amount of waste solvents and sludges to be disposed. Reduction in the toxicity of waste can be accomplished through simple in-plant treatment. Reduction of the quantity of waste can be accomplished through good housekeeping practices or by tech-